GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA

STARRED QUESTION NO:377
ANSWERED ON:20.04.2005
NUCLEAR POWER PROGRAMME
Chouhan Shri Shivraj Singh

Will the Minister of ATOMIC ENERGY be pleased to state:

(a) whether the Government has recently formulated a nuclear power programme to provide long-term energy security to the country based on indigenous nuclear fuel resources:

(b) if so, the details thereof; and

(c) the stage at which it stands at present ?

Answer

THE MINISTER OF STATE IN THE PRIME MINISTER`S OFFICE(SHRI PRITHVIRAJ CHAVAN):
==========

(a) to(c) A Statement is laid on the Table of the House.

GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY
STATEMENT REFERRED TO REPLY TO LOK SABHA STARRED QUESTION NO. 377 BY SHRI SHIVRAJ SINGH CHOUHAN REGARDING NUCLEAR POWER PROGRAMME FOR ANSWER ON 20.4.2005

(a) A three-stage nuclear power programme to utilize large thorium reserves in the country for electricity generation has been envisaged since the inception of nuclear power in the country.

(b) The three stages of the programme are:

• Pressurised Heavy Water Reactors, in the first stage, based on natural uranium available in the country.
• Fast Breeder Reactors utilising plutonium- uranium fuel cycle, in the second stage.
• Breeder Reactors for utilisation of our vast resources of thorium, in the third stage. The three stages have important fuel cycle linkages and have to be gone through sequentially.

(c) At present, there are 14 power reactors in operation with a total capacity of 2770 MWe. In addition, six Pressurised Heavy Water Reactors (PHWRs) and two Light Water Reactors(LWRs) are under construction.

A beginning to the second stage programme has been made with the start of construction of 500 MWe Prototype Fast Breeder Reactor(PFBR) at Kalpakkam, Tamil Nadu.

The third stage of the programme will be launched after sufficient base capacity of the second stage FBRs are put in operation. A technology demonstration project of Advanced Heavy Water Reactor(AHWR) is also proposed for construction.